

**Remarks:**

Claims 1-10, 12-19, and 21-43 are pending in the application. Claims 1-10, 12-19, and 21-43 are rejected. Responsive to the Office Action dated June 30, 2005, applicants have amended claims 1, 8, 12, 17, 18, 21, 27, 33, 34, 36, 38, 41, and 42. In view of the above amendments, and the following remarks, applicants respectfully request reconsideration of the rejected claims under 37 C.F.R. § 1.111.

**Claim Amendments**

Claims 1, 8, 12, 17, 18, 21, 27, 33, 34, 36, 38, 41, and 42 have been amended.

Support for the amendments to claims 1, 27, 34, and 38 may be found generally at page 2, line 16 to page 3, line 4 of the specification; and Figures 1-3.

Claim 8 has been amended to correct a typographic error.

Claim 12 has been amended to render the claim consistent with amended claim 1.

Support for the amendments to claim 17 may be found at claims 12 and 15 as originally filed, at page 2, lines 16-22 of the specification; and at Figure 1.

Support for the amendments to claim 18 may be found in claim 17 as originally filed.

Support for the amendments to claim 21 may be found in Figures 1-3 and generally at page 2, lines 16-22 of the specification.

Claim 33 has been amended to render the claim consistent with amended claim 27.

Claim 36 has been amended to render the claim consistent with amended claim 34.

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Claim 41 has been amended to render the claim consistent with amended claim 38.

Support for the amendments to claim 42 may be found generally at page 2, line 16 to page 7, line 12 of the specification; and at Figures 1-10.

Rejections under 35 U.S.C. § 102

Claims 1-5, 7-10, 12-19, 21-25, and 27-43 are rejected under 35 U.S.C. § 102(b) as being anticipated by Takanori (JP 08-043943). Applicants disagree that Takanori anticipates the claimed invention. A claim is anticipated only if each and every element set forth in the claim is found in a single prior art reference, and shown in as complete detail as is contained in the claim. In addition, the elements must be arranged as required by the claim (MPEP 2131).

However, in the interest of furthering the prosecution of the application, applicants have amended the claims to more particularly distinguish from the disclosure of Takanori.

With respect to claim 1, the claim has been amended to more particularly recite a portable projector that includes a projector housing having a first portion and a second portion that are pivotally connected, the projector housing having a closed configuration and an open configuration, such that in the open configuration the projector is supported solely by the first portion and second portion in an upright orientation with the light engine suspended from the projector housing so that it is configured to project an image onto a display surface outside the projector housing.

The projectors of Takanori include a projector housing 1 having openings 1a and 1b on the sides of the projector housing. Openings 1a and 1b are filled with screen section 3, including screen 2, and a base 4. Screen section 3 and base 4

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may be partially pulled out of the projector housing 1. Screen section 3 and base 4 appear to be partially pulled out of the housing in order to permit projection of an image onto the rear of screen 2 from within the projector housing.

None of the projectors of Takanori include a projector housing having a first and second portion, where the projector housing has an open and closed configuration, such that in the open configuration the projector is supported solely by the first portion and second portion in an upright orientation with the light engine suspended from the projector housing so that it is configured to project an image onto a display surface outside the projector housing.

The projectors of Takanori generally rest on the lower surface of projector housing 4, while sections 3 and 4 extend from the projector housing. The projector of drawing 9 of Takanori can apparently project onto an external display surface, but is clearly resting on the base of projector housing 4, and is not supported solely by a first and second portion of the projector housing in their open configuration.

Further, the light engine is clearly not suspended from the projector housing. Applicants appreciate that the Examiner suggests that if any part of the light engine 7 is mounted to the projector housing, it can be said to be 'suspended'. However, applicants suggest that they are entitled to the plain meaning of the claim, as amended: "the projector is supported solely by the first portion and second portion in an upright orientation with the light engine suspended from the projector housing". To suspend the light engine, optionally within a light engine housing (see claims 7-9), the light engine should hang so as to be free on all sides except where it is supported by the projector housing. Applicants respectfully suggest that none of the projectors of Takanori include a light engine suspended from the projector housing.

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For the above reasons, and in view of the amendments made to claim 1, applicants suggest that Takanori fails to anticipate the subject matter of claim 1.

With respect to claim 2, applicants suggest that it is not anticipated for at least the reasons given for claim 1. Additionally, applicants suggest that none of the projectors of Takanori include a light engine having "a compact state and an expanded state, and wherein, in the closed configuration, the projector housing encloses the light engine in its compact state, and in the open configuration, the projector housing supports the light engine in its expanded state". Although the Examiner points out that the projector housing is more compact when sections 3 and 4 are pushed together, applicants suggest this is distinct from a showing that the *light engine* has a compact state and an expanded state, and that the subject matter of claim 2 is not anticipated by Takanori.

With respect to claim 3, applicants suggest that it is not anticipated for at least the reasons given for claim 2. The Examiner suggests that mirror 11 would not be pointed in the correct direction in the compact state. Applicants again suggest that Takanori fails to disclose that the light engine of Takanori has a compact state and an expanded state, and that in either configuration of sections 3 and 4, that the spatial relationship between components 8, 9, 10, 11, 12, and 13 appears invariant.

With respect to claim 4, applicants suggest that it is not anticipated for at least the reasons given for claim 3. In addition, applicants note that the components of the light engine of Takanori are properly aligned and oriented for operation of the light engine regardless of the configuration of the projector housing.

With regards to claims 5 and 7, applicants suggest that the claimed subject matter is not anticipated for at least the reasons given for claim 1.

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With regards to claims 8 and 9, applicants suggest that the claimed subject matter is not anticipated for at least the reasons given for claim 1. In addition, applicants suggest that the projector of Figure 2a is supported by the base of housing 4, regardless of the position of sections 3 and 4, and further that the light engine housing is not depicted as depending from the projector housing. For these reasons, the subject matter of claims 8 and 9 is not anticipated by Takanori et al.

With regards to claim 10, applicants suggest that the claimed subject matter is not anticipated for at least the reasons given for claim 1. In addition, applicants suggest that the light engine housing of Takanori does not depend, or hang down, from the projector housing, and therefore cannot pivotally depend from the projector housing. For this reason, the subject matter of claim 10 is not anticipated by Takanori et al.

With regards to claim 12, as discussed above for amended claim 1, Figure 2a of Takanori et al. does not show a first and second portion of the projector housing that, in the open configuration, solely support the projector.

With regards to claim 13, as Takanori fails to disclose a projector having a light engine that exhibits a compact state and an expanded state, that Takanori necessarily fails to disclose the subject matter of claim 13.

With regards to claim 14, applicants suggest that the claimed subject matter is not anticipated for at least the reasons given for claims 1 and 12.

With regards to claim 15, applicants suggest that the claimed subject matter is not anticipated for at least the reasons given for claim 1. Applicants respectfully suggest that inset sections 3 and 4 of Takanori do not correspond to a clamshell structure. The projector housing of Takanori is not clamshell in shape, rather the

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square box of the projector housing 4 includes inset sections 3 and 4 which may be expanded. For example, by expanding sections 3 and 4, an opening is not created at the base of projector housing 4.

With regards to claim 16, applicants suggest that the claimed subject matter is not anticipated for at least the reasons given for claim 1.

In the interest of furthering the prosecution of the application, applicants have amended claim 17 to more particularly distinguish the claimed subject matter from the disclosure of Takanori. Claim 17 is directed to a portable projector, including a light engine having a compact state and an expanded state, a light engine housing that at least partially encloses the light engine, and a projector housing that includes a clamshell structure having a closed configuration and an open upright configuration, wherein the clamshell structure includes a first portion and a second portion that are pivotally connected such that rotating the pivotal connection converts the closed configuration of the projector housing to the open configuration of the projector housing, where conversion of the closed configuration of the projector housing to the open upright configuration of the projector housing deploys the light engine in its expanded state so that the light engine depends from the projector housing, and wherein the light engine is configured to project an image along an axis that is generally parallel to the axis of the pivotal connection.

With regards to independent claim 17, as amended, as discussed above with respect to claim 2, none of the projectors of Takanori include a light engine having a compact state and an expanded state. As discussed above with respect to claim 15, none of the projectors of Takanori include a projector housing that includes a clamshell structure. Further, none of the projectors of the reference include a

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projector housing having a closed configuration and an open upright configuration, where the clamshell structure includes a first portion and a second portion that are pivotally connected such that rotating the pivotal connection converts the closed configuration of the projector housing to the open configuration of the projector housing.

As discussed above with respect to claim 13, in none of the projectors of Takanori does conversion of the closed configuration of the projector housing to the open upright configuration of the projector housing deploy the light engine in its expanded state so that the light engine depends from the projector housing.

Further, applicants note that none of the projectors of Takanori include a light engine that is configured to project an image along an axis that is generally parallel to the axis of the pivotal connection of the projector housing. The projectors of Takanori are shown as projecting an image along an axis that is substantially orthogonal to the axis of rotation employed when sections 3 and 4 of the projector housing are expanded.

With respect to claims 18, 19, and 21-25, applicants suggest that the claimed subject matter is not anticipated for at least the reasons given for claims 1, 7, 12, and 13.

With respect to method claims 27-37, the Examiner suggests that the method of using and manufacturing the projector taught by Takanori is inherent given that it is useful and exists. Applicants suggest that, in view of the amendments and remarks above, they have shown that the claimed subject matter of claims 1-10, 12-19, and 21-26 is not disclosed by Takanori.

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With regards to claims 38-43, applicants suggest the claimed projector systems and portable projectors are not anticipated by Takanori for at least the reasons provided above for claims 1-10, 12-19, and 21-26.

In view of the above amendments and remarks, applicants request the withdrawal of the rejection of claims 1-5, 7-10, 12-19, 21-25, and 27-43 under 35 U.S.C. § 102(b).

Rejections under 35 U.S.C. § 103

Claims 6 and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takanori as applied to claims 1-5, 7-10, 12-19, 21-25, and 27-43, and further in view of Levis et al. (U.S. Patent no. 5,829,858). In particular, the Examiner suggests that Takanori teaches a portable projector according to the rejected claims, excepting that Takanori does not teach what the optical components are made of. The Examiner suggests it would be obvious to one of ordinary skill in the art at the time the invention was made to use the light engine of Levis, which includes polymer refractive elements in the projector and associated method of Takanori. Applicants respectfully disagree.

Applicants suggest that, in view of the amendments and remarks above, they have shown that the projector, projector system and methods of claims 1-5, 7-10, 12-19, 21-25, and 27-43 are not disclosed by Takanori. In order to establish the *prima facie* obviousness of a claim, the cited references must disclose each and every element of the rejected claims. Applicants suggest the *prima facie* obviousness of claims 6 and 26 has not been established.

In view of the above amendments and remarks, applicants request the withdrawal of the rejection of claims 6 and 26 under 35 U.S.C. § 103(a).

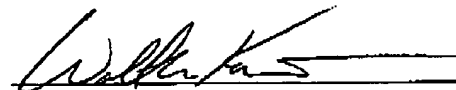
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Applicants believe that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, applicants respectfully request that the Examiner issue a Notice of Allowability covering the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to Examiner A. Sever, Group Art Unit 2851, Assistant Commissioner for Patents, at facsimile number (703) 872-9306 on September 30, 2005.



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